

National Marine Fisheries Service

Fisheries and the Marine Mammal Protection Act

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Basics of the MMPA

- Enacted in 1972
- Prohibition on “take” of marine mammals, with limited exceptions
- Protection to all marine mammals regardless of status
- Highly protective standard
 - Optimum sustainable population



Context for MMPA Enactment

- Tuna/Dolphin fishery interactions in the Eastern Tropical Pacific
- Status of Whales from over-exploitation
- Pinniped Hunts for Fur and Harp Seals
- U.S. Social Values

“It is the sense of the Congress that [marine mammals] should be protected and encouraged to develop to the greatest extent feasible commensurate with sound policies of resource management and that the primary objective of their management should be to maintain the health and stability of the marine ecosystem. Whenever consistent with this primary objective, it should be the goal to obtain an OSP keeping in mind the carrying capacity of the habitat.” 16 U.S.C. 1361

Specific Exceptions to MMPA Take Prohibition

- Incidental Take
 - Commercial fishing
 - Non-fishing commercial activities (e.g., oil and gas exploration)
- Direct Take
 - Subsistence hunting/handicrafts by AK natives
 - Scientific research, public display, and photography
 - Non-Lethal deterrence
 - Pinniped Removal Authority

Fishing and the MMPA: Historical perspective

- Dolphins in the Eastern Tropical Pacific
 - >300,000 deaths per year
 - Intentional setting on
- Zero Mortality Rate Goal (ZMRG)
 - “Insignificance Threshold” (50CFR 229.2)
- Domestic fishing pre-1987
 - General authorizations
 - Small take authorizations

Fishing and the MMPA: 1994 - Section 118

- Elements of the regime
 - Stock Assessment Reports (Section 117)
 - Commercial fishery classifications
(i.e., List of Fisheries)
 - Registration
 - Injury/mortality reports
 - Observers
 - Take Reduction Teams (TRTs)
 - Take Reduction Plans (TRPs)

Fishing and the MMPA: Potential Biological Removal (PBR)

- Definition: the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population
- Equation:
$$\text{PBR} = N_{\min} * 1/2 R_{\max} * RF$$

Fishing and the MMPA: Take Reduction Teams (TRT)

- TRTs = Stakeholder-based
- Rigorous timeline
 - Submit draft TRP
 - NMFS publishes proposed TRP within 60 days of receipt
 - Up to 90 days of public comment
 - NMFS publishes final TRP within 60 days of close of public comment period
 - 5 years to meet ZMRG

Fishing and the MMPA: Take Reduction Plans (TRP)

- TRP contents
 - Review of stock assessment information
 - Mortality/serious injury estimates
 - Regulatory or voluntary measures for bycatch reduction
 - Dates for achieving TRP goals

Fishing and the MMPA: TRPs to Date

- Short-term (6 months) goal: PBR
- Long-term (5 years) goal: ZMRG
- Plans for ZMRG must account for:
 - Economics of the fishery
 - Existing technology
 - Existing state/regional FMPs

Fishing and the MMPA: TRPs

- Completed TRPs
 - Harbor Porpoise TRP (Gulf of Maine and Mid-Atlantic)
 - Atlantic Large Whale TRP
 - Pacific Offshore Cetacean TRP
 - Bottlenose Dolphin TRP
- Proposed TRP not yet completed
 - Pelagic Longline TRT
 - Atlantic Trawl Gear TRT

Future Initiatives: MMPA Reauthorization

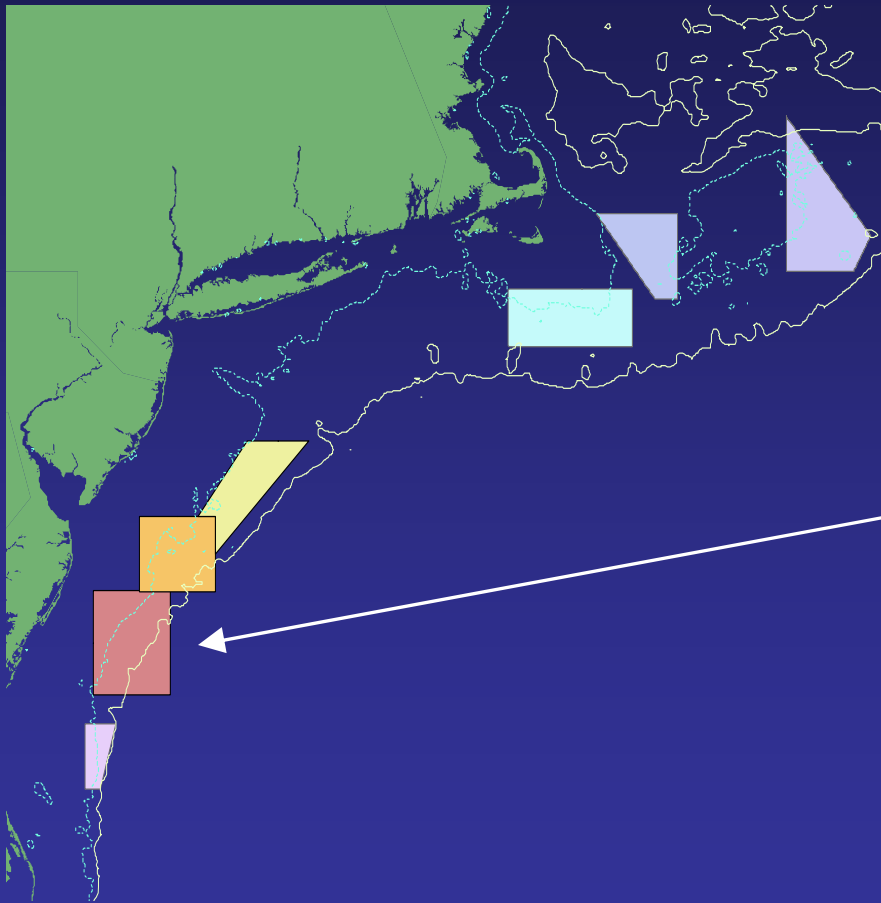
- Recreational, personal use fishing
- Evaluation and development of fishing gear and methods to reduce marine mammal bycatch
- Alternative monitoring
- Technical gear liaisons on TRTs

**Early Consideration
of
Protected Species
in
Resource Plan Development**

Two Examples

- Atlantic Sea Scallop Dredge Fishery
- Mid-Atlantic Bottom Otter Trawl Fishery

Sea Scallop Management Areas

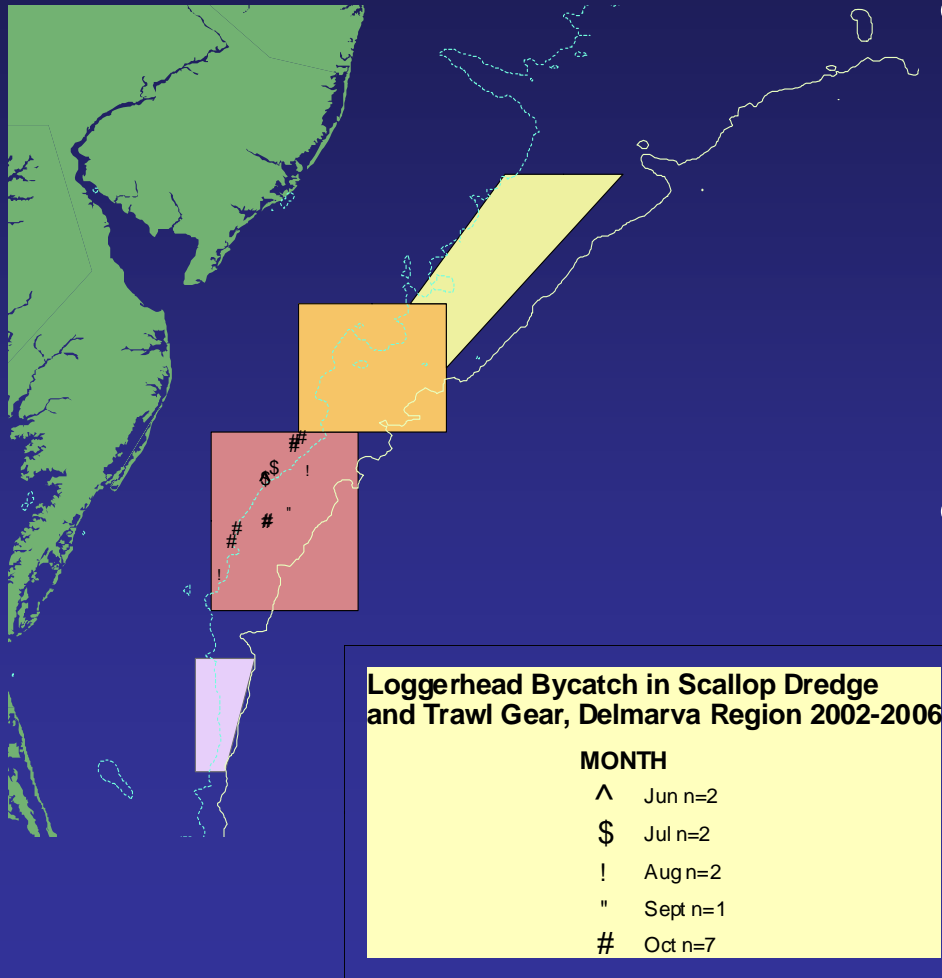


- Fishery managed with a rotational area management system
- Delmarva Access Area considered for early reopening under Framework 19 to the Atlantic Sea Scallop FMP

Impacts to Sea Turtles

- Scallop PDT considers impacts of management alternatives on sea turtles
- Should a seasonal closure to protect sea turtles be in place in the Delmarva Access area?
- What are the optimal months for a seasonal closure?

Examine Available Information



- Times and areas of observed turtle bycatch in the Delmarva Area
- Observed bycatch rates of sea turtles by month and area

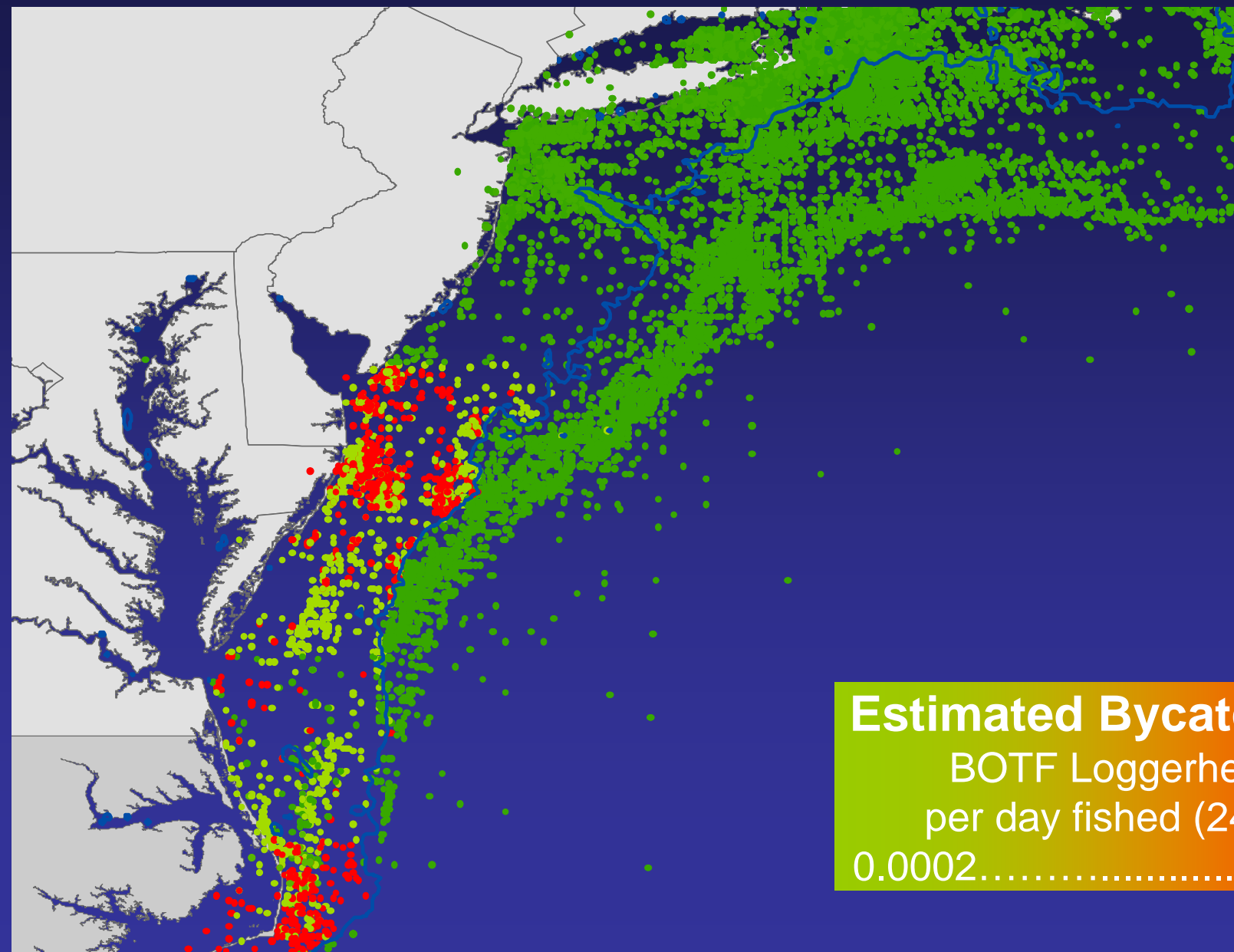
Example 2:
Mid-Atlantic Bottom Otter
Trawl Fisheries

Where is Turtle Bycatch Most Likely to Occur?

- Bycatch analyses can indicate times and areas where probability of sea turtle interactions are highest
 - In Mid-Atlantic, highest estimated bycatch rates are:
 - South of 39°N
 - Shallow waters (<50m)
 - Warm waters (>18°C)
- (Murray 2006)



Bottom Otter Trawl VTR (2003-2004)



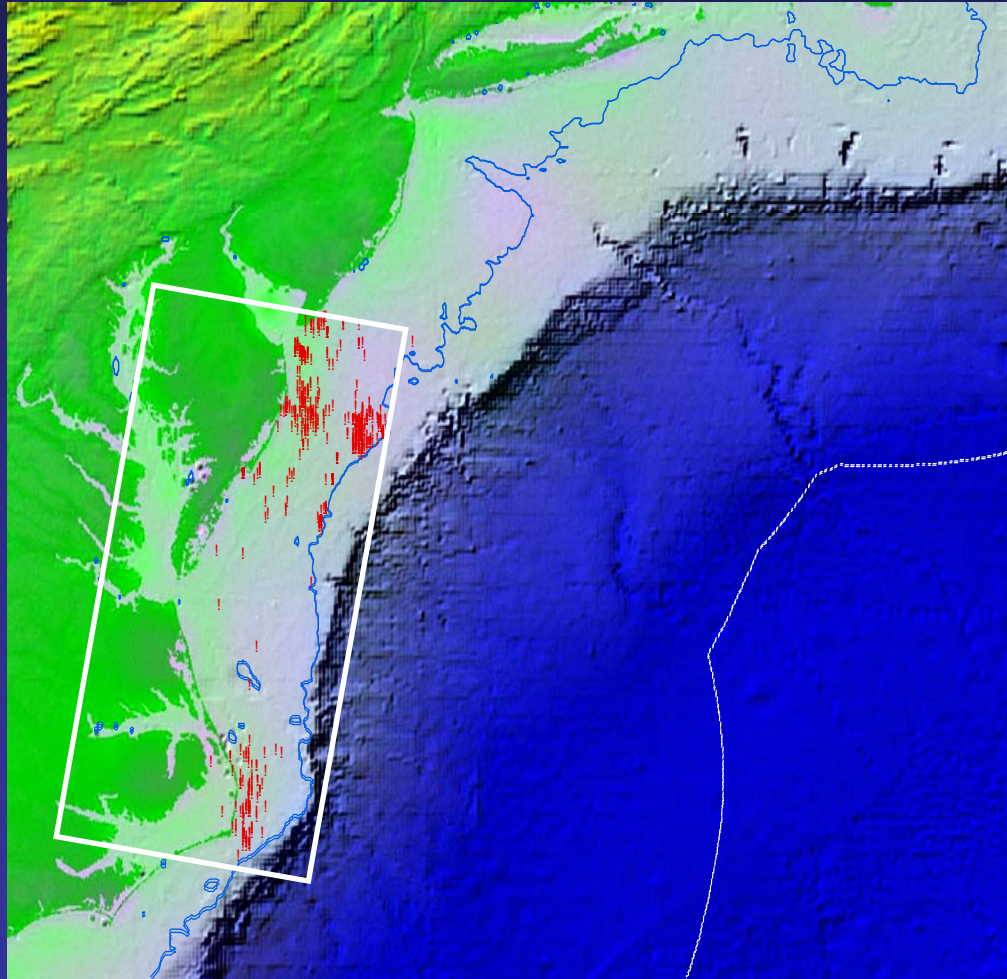
Estimated Bycatch Rate

BOTF Loggerheads
per day fished (24 hrs)

0.0002.....0.4813



Area with High Estimated Bycatch Rates of Turtles



**Atlantic Trawl Take
Reduction Team
Deliberations:**

**Will Potential
Effort Shifts
Impact Turtles?**

Thank You!



Questions?